

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A discrete software system for providing an interface between a radiology information system and a central dictation system, said discrete software system including:

a database management system;

a first application module configured to interface [for exchanging data message] with the radiology information system to access said database management system; and

a second application module configured to interface [for exchanging data messages] with the central dictation system and with the first application module to access the database management system; [and

a database management system;] wherein:

the second application module is also configured to receive data from the radiology information system through the first application module

[the first application module includes a procedure for accessing the database management system; and

the second application module includes a procedure for accessing the database management system].

2. (Currently Amended) [A] The discrete software system according to claim 1, wherein at least one of the first application module and the second application module programs

a first computer device and the database management system programs a second computer device which is separate from, but interfaced to, the first computer device.

3. (Currently Amended) [A] The discrete software system according to claim 2, wherein the first computer device includes a mass storage component in which the central dictation system stores voice files corresponding to dictation jobs.

4. (Currently Amended) [A] The discrete software system according to claim 3, wherein the radiology information system is maintained in a third computer device which is separate from the first and second computer devices but which is interfaced to the first computer device.

5. (Currently Amended) [A] The discrete software system according to claim 1, further comprising:

a first protocol DLL for transmitting data messages between the first application module and the central dictation system;

a second protocol DLL; and

a communication DLL for transmitting data messages between the second protocol DLL and the radiology information system; the second protocol DLL transmitting messages between the second application module and the communication module.

6. (Currently Amended) A method of interfacing a central dictation system to a radiology information system with a software system, the method comprising the steps of:

providing a first application module configured to interface [for exchanging data messages] with the radiology information system and a database management system;

providing a second application module configured to interface [for exchanging data messages] with the central dictation system, [and with] the first application module, and the database management system; and

[providing a database management system;]

receiving data from the radiology information system through the first application module at the second application module

[transmitting queries from said first application module to said database management system; and

transmitting queries from said second application module to said database management system].

7. (Previously Withdrawn) A software system including multiple software modules, wherein a respective trace buffer is provided for each of said software modules, each trace buffer for storing a plurality of records, each of said records indicative of an instruction executed by the respective software module.

8. (Previously Withdrawn) A software system according to claim 7, wherein each of said trace buffers is maintained in RAM.

9. (Previously Withdrawn) A software system according to claim 8, wherein each of said trace buffers is configured as a ring buffer.

10. (Previously Withdrawn) A software system according to claim 8, wherein the respective contents of each trace buffer are dumped to a nonvolatile storage device in response to occurrence of an event in any one of the software modules.

11. (Previously Withdrawn) A method of managing a software system in which messages are passed between a first process and a second process by means of a server socket in the first process and a client socket in the second process, the client socket for sending said messages and the server socket for receiving said messages, the method comprising the steps of:

registering the server socket in the first process;

instantiating the server socket in the first process;

placing the server socket into an accept mode in which the server socket awaits initiation of communication by the client socket; and

placing the server socket into a receive mode upon initiation of communication by the client socket, the server socket receiving at least one message from the client socket in the receive mode;

wherein the server socket is maintained in existence and placed in the accept mode upon the client socket terminating communication with the server socket.

12. (Previously Withdrawn) In a method of managing a software system in which messages are passed between a first and a second process by means of a socket server in the first process and a client socket in the second process, the client socket for sending said messages and the server socket for receiving said messages, wherein the method comprises registering the server socket in the first process, instantiating the server socket in the first process, placing the server socket into an accept mode in which the server socket awaits initiation of communication by the client socket, and placing the server socket into a receive mode upon initiation of communication by the client socket, the server socket receiving at least one message from the client socket in the receive mode; the improvement wherein the server socket is maintained in existence and placed in the accept mode upon the client socket terminating communication with the server socket.

13. (Newly Added) The system according to claim 1, wherein said first application module comprises:

a communications dynamic linked library configured to translate between a communication system format of the radiology information system and a raw data format;

a protocol dynamic linked library configured to convert between the raw data format and ; and

a manager application module configured to exchange information with the second application module.

14. (Newly Added) The system according to claim 1, wherein the second application module comprises:

a protocol dynamic linked library configured to convert information between a raw data format and a format specified by a messaging protocol of the central dictation system;
and

a manager application module configured to exchange information between the radiology information system and the first application module.

15. (Newly Added) The method according to claim 6, further comprising:
receiving patient information from the radiology information system at the first application module;
transmitting a query based on the patient information to the database management system from a first manager application module of the first application module; and
determining a status of a record for the patient information in the database management system.

16. (Newly Added) The method accordingly to claim 15, further comprising:
adding the patient information to the database management system in response to the status being non-existence for the record; and
resetting the first application module to a ready condition.

17. (Newly Added) The method according to claim 15, further comprising:
determining a type of event based on the patient information in response to
determination of the status being existent for the record.
18. (Newly Added) The method according to claim 17, further comprising:
determining a status of an accession number associated with the patient formation;
updating the database management system with the patient information in
response to a determination of the status being existent for the accession number; and
writing the type of event to a trace log.
19. (Newly Added) The method according to claim 17, further comprising:
determining a status of an accession number in the database management system;
determining whether a query has been issued for the accession number in the
database management system; and
querying for the accession number in the database management system in
response to determination of non-existence status for the accession number and no query being
issued for the accession number.
20. (Newly Added) The method according to claim 19, further comprising:
writing the accession number in the database management system from a
dictation; and
writing the type of event to a trace log.

21. (Newly Added) The method according to claim 20, further comprising:
transmitting a reconciliation message to a manager application module of said
first application module.

22. (Newly Added) An apparatus for interfacing a central dictation system to a
radiology information system with a software system, the method comprising the steps of:

means for providing a first application module configured to interface with the
radiology information system and a database management system;

means for providing a second application module configured to interface with the
central dictation system, the first application module, and the database management system; and

means for receiving data from the radiology information system through the first
application module at the second application module.

23. (Newly Added) The apparatus according to claim 22, further comprising:

means for receiving patient information from the radiology information system at
the first application module;

means for transmitting a query based on the patient information to the database
management system from a first manager application module of the first application module; and

means for determining a status of a record for the patient information in the
database management system.

24. (Newly Added) The apparatus according to claim 23, further comprising:

means for adding the patient information to the database management system in

response to the status being non-existence for the record; and

means for resetting the first application module to a ready condition.

25. (Newly Added) The apparatus according to claim 15, further comprising:

means for determining a type of event based on the patient information in

response to determination of the status being existent for the record.
